

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Canceled)

2. (Canceled)

3. (Currently Amended) ~~An~~The immunogenic composition according to claim 1-19 wherein the antigen further comprises an exogenous hydrophobic material that is a C8-C18 fatty acyl group.

4. (Currently Amended) ~~An~~The immunogenic composition according to claim 3 wherein the exogenous hydrophobic material is lauroyl.

5. (Canceled)

6. (Currently Amended) ~~An~~The immunogenic composition according to claim 1-19 wherein the antigen truncated gp160 protein is a peptide or peptide truncated gp160 oligomer.

7. (Canceled)

8. (Canceled)

9. (Currently Amended) An The immunogenic composition according to claim 8-19 wherein said oligomerie the amino acid sequence of the truncated gp160 protein has
consists essentially of the the sequence ef set forth at residues 33-681 of SEQ ID NO:1.

10. (Currently Amended) An The immunogenic composition according to claim 1-19 wherein the truncated gp160 protein or peptide is recombinantly produced.

11. (Currently Amended) An The immunogenic composition according to claim 1-19 wherein the truncated gp160 antigenic protein or peptide natively contains at least one cysteine residue or has at least one added cysteine residue.

12. (Currently Amended) An The immunogenic composition according to claim 1-19 wherein the proteosomes are hydrophobic, multimolecular membrane proteins.

13. (Currently Amended) An The immunogenic composition according to any one of claims 1-3, 4, or 20 formed by:

(a) bonding the hydrophobic material to said the truncated gp160 protein or peptide to form a hydrophobic-hydrophilic compound; and

(b) admixing said compound with said proteosomes, bioadhesive emulsions, or both such that said antigen compound is complexed with said proteosomes or nanoemulsion; and

(c) combining the compound complexed with said proteosomes with the bioadhesive nanoemulsions.

14. (Currently Amended) An The immunogenic composition according to claim 13 wherein said admixing step is performed in the presence of a detergent, and is followed by the step of (e)—removing the detergent by dialysis.

15. (Currently Amended) An The immunogenic composition according to claim 13 wherein said admixing step is performed by lyophilization.

16. (Currently Amended) ~~An~~-The immunogenic composition according to claim +19 formulated for intranasal or respiratory administration.

17. (Currently Amended) ~~An~~-The immunogenic composition according to claim +19 wherein the ~~vaccine~~-immunogenic composition is in a dosage form suitable for multiple inoculations.

18. (Canceled)

19. (New) An immunogenic composition comprising:

(a) an antigen that comprises a C-terminal truncated gp160 protein, wherein the C-terminal truncated gp160 protein includes the endogenous hydrophobic amino acid sequence set forth at positions 523-551 of SEQ ID NO:1;

(b) proteosomes, wherein the proteosomes are complexed or coupled with the antigen; and

(c) bioadhesive nanoemulsions,

wherein the composition elicits neutralizing antibodies to HIV in a subject upon administration of the composition to the subject, and wherein the neutralizing antibodies are present in one or more of vaginal secretions, intestinal secretions, lung secretions, and feces.

20. (New) The immunogenic composition according to claim 19 wherein the antigen further comprises an exogenous hydrophobic material that comprises about 3 to about 50 non-polar or uncharged amino acid residues.

21. (New) The immunogenic composition according to claim 19 wherein the antigen is admixed with the proteosomes to form a proteosome/antigen complex, which complex is then combined with the bioadhesive nanoemulsions.

22. (New) The immunogenic composition according to claim 21 wherein admixing is performed in the presence of a detergent, followed by removal of the detergent by dialysis.

23. (New) The immunogenic composition according to claim 21 wherein admixing is performed by lyophilization.